## Product Specification - TriAx® TX140 Geogrid

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## General

- 1. The geogrid is manufactured from a punched polypropylene sheet, which is then oriented in three substantially equilateral directions so that the resulting ribs shall have a high degree of molecular orientation, which continues at least in part through the mass of the integral node.
- 2. The properties contributing to the performance of a mechanically stabilized layer include the following:



Index Properties <sup>1</sup>	Longitudinal/ Transverse	Diagonal	General
<ul> <li>Rib pitch<sup>(2)</sup>, mm (in)</li> </ul>	40 (1.60)	40 (1.60)	
<ul> <li>Mid-rib depth<sup>(2)</sup>, mm (in)</li> </ul>	1.2 (0.05)	1.2 (0.05)	
<ul> <li>Mid-rib width<sup>(2)</sup>, mm (in)</li> </ul>	1.1 (0.04)	1.1 (0.04)	
<ul> <li>Rib shape</li> </ul>			Rectangular
Aperture shape			Triangular
Structural Integrity			
<ul> <li>Junction efficiency<sup>(3)</sup>, %</li> </ul>			93
<ul> <li>Isotropic Stiffness Ratio<sup>(4)</sup></li> </ul>			0.6
<ul> <li>Radial stiffness at low strain<sup>(5)</sup>, kN/m @ 0.5% strain</li> </ul>			225
(lb/ft@0.5% strain)			(15,430)
Durability			
<ul> <li>Resistance to chemical degradation<sup>(6)</sup></li> </ul>			100%
<ul> <li>Resistance to ultra-violet light and weathering<sup>(7)</sup></li> </ul>			70%

## **Dimensions and Delivery**

The TX geogrid shall be delivered to the jobsite in roll form with each roll individually identified. Rolls are shipped with nominal measurements: Equal to 4.0 meters (13.1feet) in width by 75 meters (246 feet) in length or 4.87 meters (16 feet) in width by 100 meters (328 feet) in length.

## Notes

- 1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02. Brief descriptions of test procedures are given in the following notes.
- 2. Nominal dimensions.
- 3. Load transfer capability determined in accordance with ASTM D6637-10 and ASTM D7737-11 and expressed as a percentage of ultimate tensile strength.
- 4. The ratio between the minimum and maximum observed values of radial stiffness at 0.5% strain, measured on rib and midway between rib directions.
- 5. Radial stiffness is determined from tensile stiffness measured in any in-plane axis from testing in accordance with ASTM D6637-10.
- 6. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
- 7. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

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